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The Benefits and Inhibitors to the Use of Commercial Item Descriptions
at Defense Logistic Agency Supply Centers

by

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of the requirements for the degree of

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ABSTRACT

The implementation of the commercial item description (CID) program is one of DoD's attempts to improve the acquisition of commercial and commercial-type products. CIDs provide the Contracting Officer with a means to solicit for commercial products using a generic description consisting of salient characteristics of products available in the commercial marketplace. This thesis addresses the benefits and inhibitors to the use of CIDs at Defense Logistics Agency (DLA) Supply Centers. Data were collected from DLA employees and Government contractors to determine the perceived benefits and inhibitors. Based on this research, it is recommended that the parameters for the use of CIDs be expanded and continued education of the acquisition workforce regarding the CID program be held.

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I. INTRODUCTION

Captain Jake Grafton discovered to his horror that no one person had a complete grasp of the tens of thousands of regulations and directives that covered every aspect of procurement. He finally found where all the regulations were stored, a library that at first measurement contained over 1,152 linear feet of statutes, regulations, directives, and case law concerning defense procurement. Jake Grafton looked at this collection in awe and disgust and never visited this place again.

Stephen Coonts [1:259]

Given the complexities and risks involved in Government business, the question is who needs it?

Robert Rossow III
General Sales Manager
Midland Brake Inc. [2:3]

A. INTRODUCTION

The quotes above reflect the reputation of Government defense procurement despite repeated attempts to reform and improve the acquisition system.

One recent attempt to reduce the defense acquisition bureaucracy is the procurement of commercial, off-the-shelf or Non-Developmental Items (NDI). The purpose of this initiative is to reduce costs, delivery times, program risk, and the proliferation of Government standards in procurement.

The impetus for buying commercial items is a result of studies by the Packard Commission, Commission on Government

Procurement, General Accounting Office (GAO), Comptroller General, Defense Management Review, and Defense Science Board. A recurring theme throughout these studies is that DoD does not make maximum use of efficient products that are currently available in the marketplace.

In 1976, NDI procurement became official policy when the Office of Federal Procurement Policy (OFPP) issued a memorandum governing the procurement of commercial products [3:1-1]. The Packard Commission, in 1986, noted a continued failure by the military Services to acquire NDI and recommended changing the procurement system to incentivize the acquisition of readily available commercial items [4:26]. In 1986, the preference for NDI procurement became law for the Department of Defense (DoD) with the passage of the Defense Authorization Act [5:8].

Under the umbrella of NDI procurement and in an effort to simplify the specifications used to buy commercial products, the concept of commercial item descriptions (CIDs) was created.

B. OBJECTIVES

The primary objective of this thesis is to critically assess the benefits and inhibitors to the use of CIDs at Defense Logistics Agency (DLA) Supply Centers. A secondary objective of this research effort is to understand CID development and implementation processes and the interface of

standardization and acquisition processes. It is envisioned that the results of this assessment will be reviewed and distributed to the appropriate DLA Supply Centers by DLA headquarters and the Office of the Assistant Secretary of Defense (Production and Logistics) and that the development and implementation processes will be modified to reflect recommendations resulting from the assessment.

C. RESEARCH QUESTIONS

In pursuit of the objectives, the following research question was posed: What are the benefits and inhibitors to the use of CIDs in DLA Supply Centers?

In support of the primary question, the following secondary questions were established:

1. What are Commercial Item Descriptions?
2. How are CIDs developed and what are the benefits and inhibitors to the use of CIDs in the development process?
3. How are the use of CIDs being implemented at DLA Supply Centers and what are the benefits and inhibitors being experienced in the implementation process?
4. How can the inhibitors to the use of CIDs be overcome?

D. RESEARCH METHODOLOGY

Research data were collected from two primary sources. Initially, the researcher conducted an extensive literature search. In order to familiarize the researcher with the

subject area, custom bibliographies were obtained from the Defense Logistics Studies Information Exchange. Key words/descriptors used to obtain bibliographies included: *CIDs, Commercial Item Descriptions, NDI, Non-developmental Acquisition, Commercial Practices, Commercial Specifications.*

Literary sources examined included published and unpublished papers, periodicals, general reference texts, Government publications, directives, and reports. A complete list of literary sources used is contained in the List of References.

Secondly, research data applicable to the specific thesis research objectives and questions were collected via personal and telephone interviews. Twenty-eight personnel at six DLA Supply Centers were interviewed. Interviewees were selected such that personnel from technical, quality, and contracting at each activity were interviewed. Seventeen contractors were interviewed representing companies providing goods to the Government. Questions asked were open ended. Each question was designed to generate a discussion of any opinion that was expressed. A complete list of personnel interviewed are contained in Appendices A and B.

E. SCOPE OF STUDY

This study focuses on two specific areas. First, an examination of the generic CID development and implementation processes at DLA Supply Centers is presented. Second,

benefits and inhibitors to each of these processes are identified.

In pursuit of information relative to the areas of study, the researcher contacted personnel in each of the DLA Supply Centers and a number of Government contractors. The size and location of the various DLA activities was not a factor. Appendix C contains a list of commands from which personnel were interviewed.

F. ORGANIZATION OF STUDY

This study consists of six chapters. Chapter I has outlined the objectives of the study in addition to providing comment on both the scope of the study and research methodology used.

Chapter II provides definitions, CID makeup, history, and a breakdown of the development and implementation processes of CIDs.

Chapter III identifies the survey methodology, presents the data, and analyzes the background information collected as a part of the survey.

Chapter IV identifies the benefits to use of CIDs resulting from the literature research and survey.

Chapter V focuses on the inhibitors to use of CIDs as identified through the literature research and survey.

Chapter VI summarizes the results of this research and presents conclusions and recommendations. The

recommendations, if implemented by DLA, will facilitate the removal of inhibitors to the use of CIDs at DLA Supply Centers. The research questions are answered and areas for further research presented.

Appendices and a List of References are provided for information and to facilitate further research in this area.

II. BACKGROUND

A. DEFINITIONS

1. Commercial Item Description

A commercial item description is a simplified specification that describes, by salient functional or performance characteristics, the available, acceptable commercial or commercial-type products that will satisfy the Government's needs [6:C-2].

2. Commercial Product

A commercial product is an item, material, component, subsystem, or system that is: (a) regularly used for other than Government purposes, (b) sold or traded to the general public in the course of normal business operations, and (c) sold at established catalog or market prices [6:C-2].

3. Commercial-Type Product

A commercial-type product is a commercial product that is: (a) modified or altered to comply with Government requirements without degrading the quality, appearance, or function of the commercial product, and as such is usually sold only to the Government and not through normal retail outlets, or (b) identified, packaged, or marked differently than the product normally sold to the general public [6:C-3].

4. Preparing Activity

The military activity or civilian agency responsible for the preparation and maintenance of standardization documents [7:xii].

5. Lead Standardization Activity (LSA)

A management activity within a Military Department or a Defense Agency that directs DoD standardization efforts for a Federal Supply Group, Federal Supply Class, or Standardization Area through the development of standardization program plans, approval of standardization projects, and identification and resolution of

standardization issues. The Standardization Directory identifies the LSAs [7:x].

6. Nongovernment Standard (NGS)

A standardization document developed by a private sector association, or a technical society which plans, develops, establishes, or coordinates standards, specifications, handbooks, or related documents. This term does not include standards of individual companies [7:xii].

7. Market Acceptability Criteria

Criteria that establish the threshold for determining whether or not an item has been accepted by a commercial market. "This approach relies heavily on market research and a continuing awareness of the marketplace.[8:1]"

B. CID PROGRAM

The CID concept was initiated in 1976 by the DLA under a program called the Commercial Commodities Acquisition Program. This program tested the feasibility of buying commercial products using very short product descriptions. The test resulted in the creation of 2,227 commercial item descriptions, primarily in commodities such as medical and clothing, used to procure off-the-shelf products. The success of the test resulted in the institutionalization of the CID program. The next step in making CIDs a viable entity was the replacement of existing MILSPECs with CIDs for items that demonstrated commercial market acceptability. These actions continued until 1983, when a small businessman, who built his business around a MILSPEC, complained to his Congressman that he was losing business as a result of the requirement to

demonstrate commercial market acceptability. Congress legislated a limit to the use of commercial market acceptability in that year's Appropriations Act. The restriction was removed in 1986 but the passage of the Competition in Contracting Act (CICA) prevented a return to the use of market acceptability as a precondition for bidding, blunting the renewed use of CIDs. [9:72] CICA requires use of full and open competition in the contracting process. If a vendor desires to bid but is not involved in the commercial arena for the advertised product, then that vendor is currently entitled to a form, fit, and function description or a specification that delineates the product. This was perceived by DoD to conflict with using commercial market acceptability as a precondition to the purchase of NDI.

This last legislative stumbling block to the use of CIDs was removed in 1987 with the passage of the Defense Appropriations Act which mandated the acquisition of NDI. In response, DoD proposed a plan for commercial product procurement that included CIDs.

Even with the legislative mandate, the use of CIDs and procurement of NDI has not grown as expected. The resulting conversion to CIDs from MILSPECs has been sporadic with widely ranging results from Supply Center to Supply Center. In 1991, DLA developed 311 CIDs [10]. There is one DLA Supply Center that is a Preparing Activity, the Defense Personnel Support Command (DPSC). They are the most successful DLA activity in

using CIDs, accounting for development of 298 of the 311 total. Other DLA commands are recording CID development at very low levels but are using CIDs developed by other Preparing Activities. [11]

C. CID COMPONENTS

The following section presents a summarized breakdown of the components that make up a commercial item description. The CID preparation guidelines are flexible providing a framework within which the preparer has a significant amount of latitude. [12:1]

1. Heading

The heading for the CID includes the document number, date, and supersession data.

2. Product Description Identification

The product description identification is always "commercial item description" for a CID.

3. Item Name

The item name is selected using the guidelines for selecting an item name when developing a Federal specification.

4. Preamble

The preamble is a one of six predetermined statements. The statement used is based on the situation from which the CID was developed and includes:

- a CID replaces an existing Federal, military, or departmental specification
- a CID is developed without precedent specifications
- a CID partially covers an existing specification
- a CID supersedes an existing Federal specification
- a CID supersedes a military or departmental specification
- a CID has not received final approval

The specific statements to be used with each situation are found in the Federal Property Management Regulations (FPMR), Chapter Seven.

5. Abstract

The abstract is a statement that combines the scope and intended purpose of the item. This section may include common or colloquial item names.

6. Salient Characteristics

The salient characteristics describe the product by providing functional, performance, and design characteristics.

7. Contractor Certification

The contractor certification is optional for DoD use in CIDs. If used, the vendor guarantees that the product provided is the same as described in the CID and that the Government reserves the right to require proof of conformance. This section can also include a market acceptability

statement, a requirement for bid samples, and testing and inspection requirements.

8. Metric Product Certification

The metric product certification is the same for all CIDs and states that the products manufactured using metric measurements will be given the same consideration as those using inch-pound units if it meets the specified tolerances of Federal Standard 376.

9. Regulatory Requirements Statement

The regulatory requirements statement is used only when applicable. This section outlines regulatory requirements as they pertain to the item described in the CID. An example is hazardous material labeling requirements established by statute.

10. Preservation, Packaging, Packing, and Marking Statement

The preservation, packaging, packing, and marking statement is generally standard in CIDs. Some CIDs may have special packaging requirements and guidelines for this section are outlined in the applicable contract.

11. Identification Number

The identification number will begin with the letter A to denote a CID unless a valid Federal or military specification describes the item. In that case, the CID will retain the valid specification number.

12. Notes

The notes contain practical, relevant information that does not appear in other sections of the CID such as addresses for obtaining referenced documents, ordering data, national stock numbers, or cross references to items previously described in a specification the CID is replacing.

An important piece of information to include in this section is the name, address, and telephone number of the preparer so a buyer can obtain additional information to support the procurement.

13. Activity Symbols

Activity symbols included in the CID are the same as in a Federal specification.

14. Project Number/Federal Supply Class (FSC)

The project number is assigned by the Department of Defense (DoD) for project identification and control. The FSC is assigned in the same manner as Federal specifications.

[13:7-1]

D. CID DEVELOPMENT PROCESS

Whenever a Military Service or DoD Component decides it must purchase equipment or other material (computer software, for example), it must conduct market analysis to determine whether an existing product meets that need before undertaking expensive and time-consuming R&D to develop a new item. Market analysis is now required by statute [14:3].

Prior to commencing an acquisition, the determination of commercial product availability must be made. If there is a

suitable commercial product and no NGS or CID already exists, then development of a CID commences.

CIDs are used to buy existing commercial items. "The goal of the CID program is to prepare technical documents that are easier for suppliers to use and that allow manufacturers to provide products from their product line [6:C-2]."

The method predominantly used, prior to CIDs, for procurement of both NDI and military-unique products was the military specification. The difference between a CID and a specification is that a CID is less detailed and relies on the supplier's standard procedures for packaging, marking, and product design and frequently relies on market acceptability to ensure adequate testing and quality control. Special military unique requirements are often included in a specification but are the exception in a CID rather than the norm. [6:C-2]

In addition to simplifying the actual documents used in commercial product acquisitions, CID usage has been elevated in priority. The most preferred method of development and use of product descriptions in Federal procurement is the NGS. The next most preferred method is the CID. [11:3-2] This change in priority reflects management support of the CID program and also the recognition of MILSPECs as an impediment to buying commercial items by DoD.

A CID shall be developed only if an NGS does not exist that meets the users' need. If an NGS exists that nearly meets the need, but requires changes, the Preparing

Activity shall develop a CID using the NGS as the primary basis for the requirements. At the same time the Preparing Activity shall request the appropriate NGS Board to make the necessary changes to the NGS, and the CID shall be canceled when the changes to the NGS are made [13:D-1].

The development of a CID can be governed by the establishment of a market acceptability criterion, a threshold that determines whether an item is accepted in the marketplace. To use this approach, market research and a continuing awareness of the marketplace are necessary. [8:2]

Market acceptability criteria are developed by analyzing both the item and the market in which the item sells. The criteria are not fixed but rather are a form of the prudent businessman concept. Examples of possible criteria include:

- performance, serviceability, and maintenance characteristics of the item
- quantity sold
- length of time the item has been sold in the marketplace
- parts support capabilities

Documentation to support the criteria should include the market research information, minimum needs assessment, and any other findings substantiating the criteria. The criteria should also be included in the Quality Assurance Provisions section of the CID. [15:2]

Another method for development of CIDs is a request for bid samples and analysis of the products provided to determine

the minimum acceptable needs of the Government and building the description of the new CID around the required salient characteristics.

Once market acceptability has been established and/or bid samples analyzed, the LSA approves the standardization project and draft development begins. The LSA for CIDs is the General Services Administration (GSA). [15:12] The format and content guidance are available in the FPMR.

The Preparing Activity shall send a draft document and distribution list to each custodian as directed by the Department of Defense Index of Specifications and Standards (DODISS). The draft document should also be sent to industry representatives or manufacturing associations for review. Once the review by all parties is complete and all issues resolved, the Preparing Activity may approve the CID and forward the document to GSA for document numbering. [7:D-2]

E. CID IMPLEMENTATION PROCESS

The initial focus for implementation of CIDs was to review existing MILSPECs for products that were readily available in the marketplace. This action took place in all Services and in DLA activities.

A second method used to identify items for procurement through use of CIDs was a review and classification of possible commercial items by the standardization office at each supply center [16].

The current method of implementation of CIDs is three-pronged. First, purchase request (PR) preparers are educated on the use and preparation of CIDs. Second is a technical review of all purchase requests and commodity types to determine applicability of current CIDs and possible future applicability of a CID. Last is the LSA's random review of purchase requests for applicability of current CIDs and possible future applicability of a CID.

The PR preparer's education takes the form of on-the-job training (OJT) and formal education. Through OJT, the preparer can obtain information from the FPMR, the technical office, the standardization office, the contracting office, and personnel in his immediate working area with experience using CIDs.

The Office of the Secretary of Defense (OSD) has established two classes that provide needed information to not only preparers but also to technical, standardization, quality, and contracting personnel. The first class is a two day workshop entitled "Nondevelopmental Item Acquisition Training" and focuses on all tools for buying NDI, including CIDs. The second class is a two hour CID workshop that is exclusively devoted to CID preparation and use. Attendees at each also receive a handbook on CID preparation for their office use.

Once a purchase request preparer is trained, they become an additional implementor of CIDs by reviewing the DODISS to

determine if an existing CID is applicable to their purchase request and so annotating the PR if it is. This is the same type of check that the technical office performs but provides a double-check on this portion of the process.

The second method, the technical review, consists of determining if a CID can satisfy a PR. A CID may be more appropriate and replace a MILSPEC, FEDSPEC, or other Government standard. Also, CID usage may result when technical review personnel recognize that a requested item may be a commercially available item. If so, then the technical office refers the PR or item description to the Preparing Activity for development of a new CID.

The standardization branch conducts random audits of PRs in the technical branch to determine applicability of the CID program. If a CID is applicable but does not exist then the Preparing Activity is notified and requested to develop an appropriate CID as noted above. [17]

F. SUMMARY

This chapter first defined the terms most closely ingrained with the use of CIDs. Then it briefly described the background surrounding the institutionalization of the CID program. It described the functional components of a CID. And finally, the CID development and implementation processes

were delineated. Chapter III will present the research methodology and present and analyze the supporting data collected.

III. PRESENTATION OF SUPPORTING DATA

A. INTRODUCTION

This chapter presents the research methodology and the supporting data collected during this research effort. Where applicable, comparable data are presented in the same subsections. Government data are disclosed first and are followed by data collected from defense contractors.

B. RESEARCH METHODOLOGY

1. Method

a. Survey Type

The survey method selected for this thesis was a telephone survey. There are multiple advantages derived from a telephone survey:

- It provides the opportunity for quality control over the data collection process.
- It is reasonably cost efficient.
- Data can be gathered quickly. [18:18]
- Clarification of the respondent's answers can be obtained immediately [19:96].

There are two disadvantages that constrain a telephone survey. The first is the length of the interview.

Respondents tend to tire after 20-30 minutes on the telephone although an interviewer may not recognize this fact. This limits the complexity of the questions asked. The second constraint is the honesty of the respondent. There are claims that the respondent may lie to cut the interview short. The respondent may feel hostile toward the imposition on his or her time or even resent the interview as an invasion of privacy. [18:67]

The telephone interview was chosen over the personal interview because of cost. Funding for travel was restricted due to a decreasing Defense budget and the cost of conducting personal interviews was prohibitive. The telephone survey was chosen over the mail survey because the researcher felt that a telephone survey would have a higher rate of response than a mail survey. The literature research did not reveal data to support or disprove this opinion. Research did indicate that the telephone interview is an accepted method of data collection. "Rogers (1976)...found no differences between the two modes in reports {telephone and personal interviews} [20:9]."

b. Selection of Respondents

The process of developing and implementing CIDs starts at the end-user, moves through the engineering, technical, quality, standardization, and contracting offices and ends with the vendor. The selection of the sample pool

consisted of people from these functional areas at the six DLA Supply Centers because they had experience using CIDs. DLA headquarters assisted by providing the names and telephone numbers of personnel in each area.

Contractors were selected from a list provided by the Coalition for Government Contractors, an association of vendors that transact business with the Government. The selection was made from the list provided.

c. Sample Size

Two sample sizes were required for selection. The first was the number of interviews to be conducted from the DLA Supply Centers. Personnel from the departments of procurement, technical, and quality at each of the six centers would need to be interviewed. The minimum sample size acceptable for this portion of the research was determined to be eighteen, representing input from each department at each center.

The second sample size to be determined consisted of contractors. Two factors were of concern when interviewing contractors. First, the contractors interviewed must have sold commercial or commercial-type products to the Government via solicitations incorporating a CID. Second, the various commercial commodities available in the market must be represented by the surveyed contractors. To properly select contractors, a breakdown of industry types was required.

"Jobs '91", a sourcebook of industry trends and forecasts, breaks industry into twenty-nine categories (Appendix D) [21:viii]. Because this research deals with a product and not a service, ten service categories were not included for survey. Additionally, the categories of agriculture, insurance, and publishing were eliminated because the item is not applicable for Government procurement. Energy, utilities, and automotive commodities categories were eliminated because research revealed that no CIDs have been written for energy or automotive products at the time of completion of this thesis [21 and 22]. The remaining thirteen commodity categories are:

- Aerospace
- Chemicals
- Computers/Electronics
- Conglomerates
- Construction
- Consumer Products
- Fashion
- Food
- Manufacturing
- Metals/Mining
- Paper
- Pharmaceuticals/Health Care
- Telecommunications

For the survey to be valid, the minimum sample size was determined to be thirteen representing responses from one contractor in each category.

d. Survey Recording

From the samples selected, each respondent was contacted by telephone and the results of each call recorded on a Telephone Call Sheet (Appendix E). The call sheet included the name of the interviewer and the respondent, telephone number, date, disposition of the call, and notes. The call disposition consisted of:

- 1 - no answer
- 2 - busy signal
- 3 - complete interview
- 4 - partial interview
- 5 - interview refusal
- 6 - immediate hangup
- 7 - respondent temporarily unavailable
- 8 - respondent no longer attached to command
- 9 - answering machine
- 10 - nonworking number

When an interviewee was reached, an introduction of the interviewer, the project, and a verification of the telephone number occurred. The introduction was standard and is shown in Appendix F. It was anticipated that not all

respondents would readily agree to the survey without additional information. The types of requested information anticipated were:

- Who is sponsoring this survey?
- How did you get my name and number?
- What is the purpose of this survey?
- Who will see the findings?
- Will the findings be kept confidential?

The interviewer determined prior to conducting the interviews that the first four questions were easily answered without affecting the quality of the survey. If a respondent asked question five, he/she was given three options:

- discontinue the interview.
- all answers would be treated confidentially.
- a partial interview with all data provided not protected by confidentiality.

At this point the interview commenced or was discontinued as determined by the respondent.

e. Survey Questions

The chosen format of the question is open so as not to guide the respondent in his or her answers. " . . .closed questions convey by definition more (i.e. more

specified) information than open questions do, (i.e. are more guiding in the answer process by their very nature) [19:97].

Additionally, "research has shown that the usefulness of the replies to open and closed questions was not significantly different [19:97]."

The questions were arranged in a predetermined order beginning with simple biographical data and progressing to more difficult questions on CIDs, their benefits and inhibitors.

The questions posed to Government personnel are included in Appendix G and questions asked of Government contractors are shown in Appendix H.

C. SUPPORTING DATA PRESENTATION

General data collected from surveys of DLA employees and contractors are presented in this section.

1. Experience

a. Government

The first question on the survey, "How long have you worked in the field you are currently in?" was preceded by similar information gathered on the call data sheet, specifically, "How many years have you been in the job you are currently in?" and "How many years have you been at this activity?".

The purpose of these questions was to determine the level of experience and familiarity with the activity and

field of expertise on the part of the interviewees. A significant lack of experience would bias the data and render the information gathered ineffective.

The average number of years experience for Government employees as compiled from Appendix A in each of the three areas was:

- Job - 5.5 years
- Activity - 14.6 years
- Field of expertise - 14.3 years

All three figures indicate a significant level of experience in each category lending credibility to the answers given.

b. Contractors

Experience information on contractors was gathered on the call sheet and only one question was asked, "How long have you worked in the field you are currently in?". Only one experience question was asked because the respondents are not active participants in the development, implementation, and maintenance process involving CIDs. Industry and trade associations are involved in the development process but not individual vendors. The vendors, in the procurement role, have seen many changes to the acquisition process and the significant factor of the experience element was the amount of time the interviewee had spent in his or her field.

The average length of time spent by the interviewed contractor employee in his or her field, as compiled from Appendix B, was 16.65 years. This figure represents a significant level of experience and lends credibility to the answers given.

2. CID Usage

a. Government

The second question on the Government questionnaire was "Does your command use commercial item descriptions?" If the answer was yes, then the respondent was asked to rate the frequency of use as high, medium, or low.

The purpose of this question was to determine if all personnel in the affected departments at the DLA Supply Centers were aware of the level of CID usage at their activity. Additionally, these data were compared with information supplied by DLA headquarters staff to determine if there was a significant difference between the two sets of data.

The answers supplied by the interviewees indicated a strong awareness of the frequency of CID usage at their center.

CID usage is being accomplished at all the DLA Supply Centers except the Defense Fuels Supply Center (DFSC). The level of use varies as shown in Figure 1:

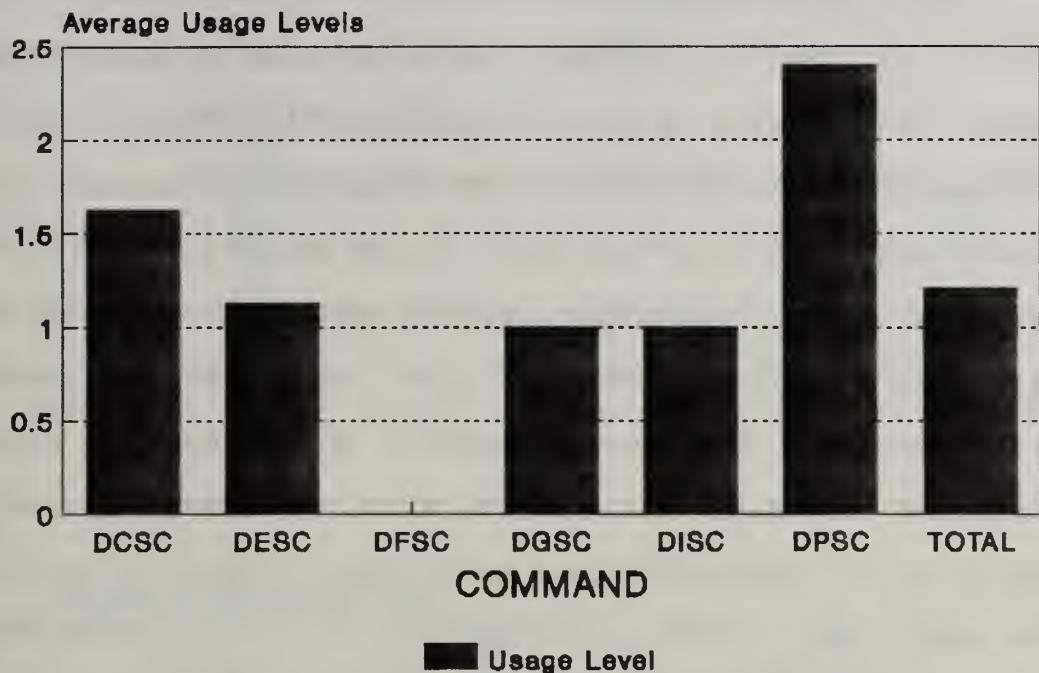


FIGURE 1: FREQUENCY OF CID USE AT DLA SUPPLY CENTERS

The usage levels shown for the supply center survey results are based on an average of the responses received from the interviews. The average was computed by assigning a value to each frequency (low = 1, medium = 2, high = 3) and multiplying by the number of responses. All group values were summed and divided by the total number of responses for the center.

The average of the centers combined is 1.21, representing a low usage level as represented by the Government employees. This is an indicator of an area for potential growth.

b. Contractors

A series of questions were posed to the industry segment to determine if they had experience selling commercial or commercial-type products to the Government or to DLA Supply Centers when CIDs were included in the solicitation. If the contractor answered affirmatively to selling to the Government and/or DLA Supply Centers via CIDs, the respondent answers were included. This corresponds to a one hundred percent sample of defense contractors with experience providing commercial or commercial-type material to the Government when CIDs were used in the solicitation. Of the contractors interviewed, sixty-five percent had sold products to DLA Supply Centers.

Thirty-five percent of the contractors interviewed, although they had not sold products to DLA Supply Centers, had sold commercial products to the Government through solicitations incorporating CIDs.

3. Responsibility for CID Use

The third question asked of DLA personnel was "Are you responsible for your command's use of CIDs?". The purpose of this question was to establish if there is a clear identification, by the people involved in the CID processes, of the department within the Supply Centers that is the lead department for the use of CIDs. The same questions were asked

of DLA headquarters personnel to determine if there was a correlation of understanding at headquarters and in the field.

a. Majority opinion

The data were analyzed by two groupings, command and field of expertise. In both cases, as shown in Figures 2 and 3, the majority opinion identified Technical as the department responsible for the command's use of CIDs.

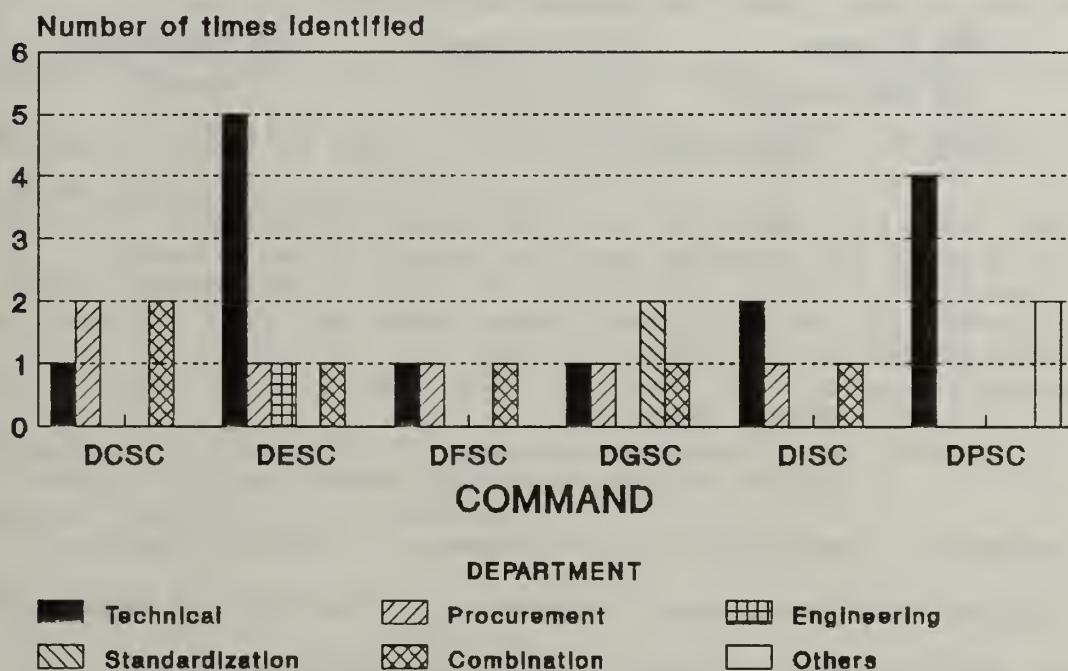


FIGURE 2: RESPONSIBILITY FOR CID USE BY COMMAND

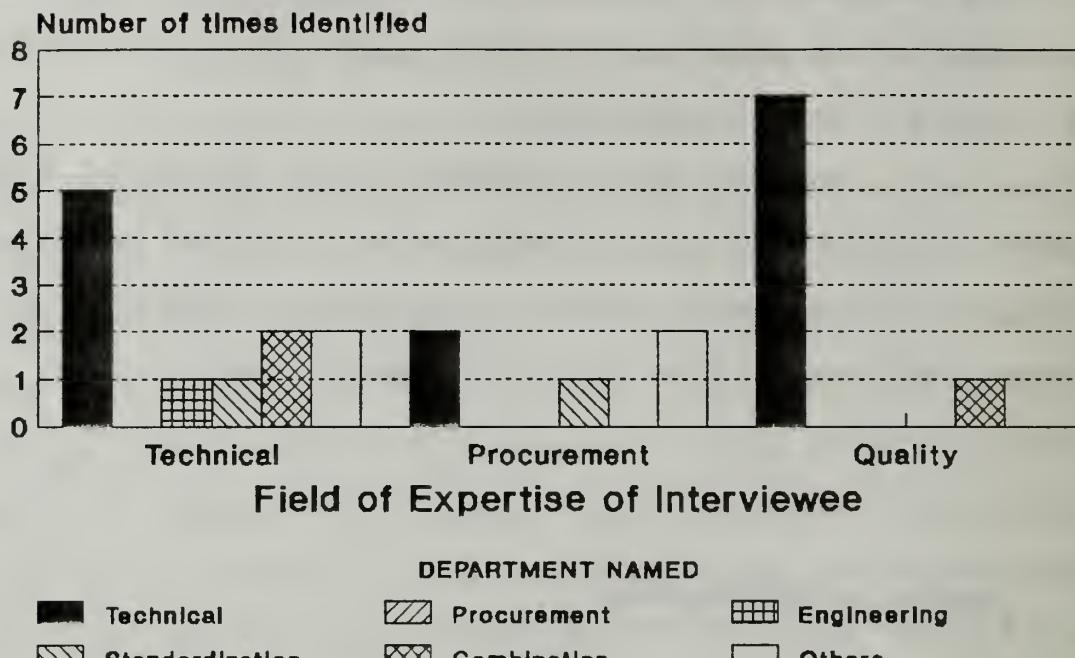


FIGURE 3: RESPONSIBILITY FOR CID USE BY FIELD OF EXPERTISE

The identification of the technical department as the lead organization for the use of CIDs corresponds with DLA headquarter's information. [24]

b. Minor Opinion

There was no secondary consensus of opinion. The answers identified Procurement, Standardization, and Engineering departments (Appendix I) as well as a combination of groups depending on the factors involved.

4. CID Use Process

The fourth question asked of DLA personnel was "Describe how CID use is accomplished at your command." Answers received to this question were too varied to be of use for analyzing the CID use process at the Supply Centers.

After completing all Government interviews and reviewing the responses, the researcher determined that the question was invalid for evaluation. If followup research is conducted in this area, background research should identify specific process functions relating to CID use and center the survey questions more directly on those focal points.

5. Training

The fifth question asked was: "Have you received any training on the use of CIDs? If so, what kind?"

Of the twenty-eight people interviewed, twelve had not received any training on the use of CIDs. Eighteen had received informal training and eleven of the eighteen had received formal training as well.

Answers to the question are depicted in Appendix J. The types of training most noted were on-the-job, seminars, and a range of classes that include the Defense Systems Management College, OSD Nondevelopmental Item Acquisition classes, and OSD CID workshops.

D. SUMMARY

This chapter discussed the research methodology and presented the background data collected from the survey of both contractors and DLA personnel. The next chapter will identify benefits associated with the use of CIDs.

IV. BENEFITS OF CID USE

A. INTRODUCTION

This chapter addresses the benefits identified during a comprehensive literature review on the development and implementation of CIDs for both the Government and industry. It also addresses the benefits identified in surveys of Government personnel at DLA Supply Centers and Government contractors.

B. BENEFITS OF CID USE IDENTIFIED IN THE LITERATURE REVIEW

1. Government Benefits

a. *Development Process Benefits*

The use of CIDs to procure commercial and commercial-type products has some benefits that accrue in the development of the document.

(1) *Reduction or avoidance of research and development (R&D) time and costs*

Existing products are relatively inexpensive to purchase. Someone else has already paid the Research and Development costs. Commercial products are mass produced - cost is spread over scores or hundreds of customers rather than just DoD. Off-the-shelf products are, by definition, immediately available - long product development leadtimes (typically 8-12 years for a major weapon system) may be significantly reduced [25:8].

By using existing commercial parts and products rather than custom designing new items, DoD can

realize substantial time savings for development and production [26:iii]. By developing a CID and procuring a commercial product instead of engineering a new item, a time savings is accrued. Once developed, the lead time to delivery is shortened because industry is providing an existing commercial product instead of devoting resources to creation of a new product.

(2) Industry input into the document

The Defense Standardization Program and Policies Manual directs that manufacturers and industry associations be given the opportunity to provide comments when a CID is being developed or revised. This is a benefit because the comments by industry increases the communications between Government and industry and enhances the probability that the developed document will be a good one. "Once the document is on the street, there are fewer problems [27]."

(3) Reduced document development time

This benefit is intertwined with the simplicity of a CID as compared with a Federal and Military Specification (FEDSPEC and MILSPEC). This simplicity results in a clearer and more understandable document. This, in turn, means that there is less research required to develop the draft document and less handling time on the part of activities providing inputs for the revision of the CID. If required, the development of a CID can be expedited via

telephone calls, telefax, or by requesting a speedy reply by mail. A CID, from conception to completed document distribution, takes approximately 26 weeks to develop in a routine cycle. [28]

b. Implementation Process Benefits

The use of CIDs to procure material has several benefits that accrue during actual implementation and use of CIDs:

(1) Reduced delivery times of procured products

There is no development time associated with commercial and commercial-type products. It is a commodity that already exists in the marketplace and is a proven product. Because the product already exists, the process to manufacture it also exists and the item can be readily manufactured and delivered to the procuring activity. [29:10] In many cases, the requested item may be in inventory and need only to be pulled off a shelf and delivered to fulfill the contract.

(2) Enhanced ability to field state-of-the-art equipment

The goal of nondevelopmental item acquisition is not only to decrease the time from the identification of requirements to the fielding of the item but also to field state-of-the-art-equipment with full logistics support [30:35].

This goal can be achieved with the use of CIDs because market research identifies the current technology

available for procurement. This factor, combined with reduced lead times, puts the present technology into the hands of the user much faster than before when specifications had to be developed.

(3) Increase in competition and available number of sources

The primary reason for the increase in the number of sources is because CIDs identify only the salient characteristics of the product requested [11:4-2]. This represents a reduction in the number of attributes required for similar items when FEDSPECs and MILSPECs are used for procurement. This allows more vendors who compete in the commercial marketplace to also compete in the Government procurement process.

For an item to be procured via a CID, market research has already documented its availability and proven performance in the private sector. It is not a military unique item and has many end users. [29:11] Often, when a specification is used to procure items, DoD has created suppliers of a product by eliminating commercial products that could fill the need of the user so that a new product is designed and developed for one customer - the military. In the opinion of the researcher, the use of CIDs reopens markets that have been closed to commercial suppliers without

eliminating vendors that provided products to the Government via MILSPEC procurements.

(4) Reduced document maintenance requirements

This benefit is related to the simplicity of the CID. The document is shorter and simpler, hence, it is also easier to maintain. [31:28] There are no statistical records kept on the length of a CID versus a specification but, on the average, it is estimated that a CID created to replace a MILSPEC is half the length of the original document [17].

(5) Reduction in the complexity of the product description and requirements

Inappropriate use of government specifications and standards levies requirements on commercial products to operate in environments to which they will never be subjected. Mil Spec components are sometimes required in system design to achieve a certain level of reliability and environmental resistance. In some instances, appropriate setting of the end product performance parameters would allow for use of proven commercial products instead of more costly products designed around the Mil Spec components [32:222].

A common complaint regarding the use of FEDSPECS and MILSPECS is that the documents are voluminous, contain multiple citations of other applicable specifications, and are difficult to read and understand. The CID is shorter, contains little or no tiering of documents, and is easier to read and comprehend. [29:11]

When a CID is initially developed, market research is conducted to identify the commercial products

available to meet the end user's needs. This research and the industry literature collected provide the basis for the majority of the data forming the CID. A document is created that identifies the functional salient characteristics of a product and is similar in representation to industry's own commercial item descriptions. This is an added benefit because the experience of the commercial market is transferred into the Government acquisition process.

Tiering of reference documents in CIDs is strongly discouraged. [6:C-2] This aids in reducing document complexity, making it easier for contractors to identify all requirements they must meet in selling a product to the Government. When the same item is procured via a specification document, tiering of requirements for vendor compliance can reach to third and fourth levels of reference documents. A result of this excessive tiering is increased complexity and many vendors do not even have the necessary documents they need to determine what prerequisites must be met to successfully bid on the proposal.

(6) Reduction in cost, schedule, and technical risk

Existing products mean existing production techniques and an existing pricing structure. Nothing new is being created when a CID is used to procure products and cost,

schedule, and technical risk are reduced to very low levels.

[33:1-5]

(7) *Improved quality*

Commercial products, when salient characteristics are properly described, have a quality level that is as good, if not better, than that of specially developed items [14:5]. Commercial products are put through the "trial by fire" of the marketplace before the Government is even considering procurement of the item. The marketplace is a natural weeding-out mechanism where inferior quality products do not survive. There is no comparable process for the Government when full product development results from acquisition by specification.

2. Commercial Industry Benefits

a. Reduction of burden placed on contractors

The costs of complying with a host of unique federal procurement regulations-and the criminal penalties for errors in reporting-pose a major barrier for commercial companies in performing defense business, particularly for small companies that cannot afford the additional administrative and personnel expenses [32:94].

CIDs and the process the Government has gone through in implementing this program has reduced some burdens placed on the private sector.

First, the reduction in complexity of the purchase description makes it easier for the contractor to identify the product being requested.

Second, some legislative and regulatory requirements have been eliminated or revised to incentivize procurement of commercial products. For example, the requirement for contractors to submit cost or pricing data has been deleted for commercial items acquired competitively.

[34:8]

b. Ability to compete for Government business using existing facilities and products

Many firms have exited from doing business with the Federal Government over the last several years. For many of these contractors, they have developed a commercial market and are content to focus on expanding that sector of their business.

Previously, to return to Government business meant selling to the Government, primarily, via the use of specification in solicitation documents. Usually, this also meant a change in tooling to produce the product, a change in normal packaging and marking to ship the product, and the additional burden of testing requirements imposed by the specification.

Now, with the use of CIDs, a contractor uses the same methods to make, test, and deliver the product that are being used with his commercial customers. This is an enticement for contractors to return or to start doing business with the Government.

C. BENEFITS IDENTIFIED IN THE SURVEY

1. DLA Supply Centers Survey Results

This section will address benefits identified in the DLA Supply Centers survey. The survey question asked was, "What are the benefits of using CIDs at your command?"

The majority opinion section will address benefits identified ten or more times by respondents. The minority opinion section will address benefits identified five or more times but not greater than nine times. The final portion of this section provides benefits identified in the survey that were not found in the literature review or named in the major or minor opinion sections. A synopsis of all identified benefits is provided in Appendix K.

a. Majority Opinions

DLA supply center employees identified three major benefits of using CIDs in the procurement of commercial and commercial type products.

(1) *Improves competition and increases sources*

This benefit was identified twelve times.

The use of CIDs increases the number of possible sources for material and improves the competitive process for commercial and commercial-type products as identified in the literature review.

Other points identified by respondents relating to increased competition and sources is that the CID

is a better marketing tool than a specification. It provides a better description of the required product and draws more responses from industry. [35]

Expanded competition and increased sources also leads to an expansion of the industrial base for DoD [36]. The Government is opening another market for suppliers that previously did not do business with the Government. This relates to an enlargement of the existing base of suppliers used by the Government.

(2) Reduces the number of specifications

This benefit was identified ten times.

The use of CIDs translates into a reduction in the number of FEDSPECS and MILSPECS that are used and maintained. Items previously bought with specifications can now be procured using commercial item descriptions and the related specifications can be deleted. [37] Since the implementation of the CID program fourteen percent of the MILSPECS and Military standards have been canceled [38].

One of the initial actions implemented in institutionalizing the CID program at DLA Supply Centers was the review of specifications in use to determine which of these were being used to procure products readily available in the commercial marketplace. Once an item was identified as commercial, a CID was developed and the applicable

specification was canceled. In 1991 alone, 311 specifications were replaced by CIDs in DLA activities.

(3) Plain language document

This benefit was identified ten times.

Some of the comments by interviewees include:

- "Requirements are more readily understood by industry and the customer when a CID is used. [27]"
- "CIDs provide a better description of the product [39]."
- "It's a cleaner procurement document (if done right) [40]."

Additionally, several respondents said that industry likes CIDs because they are simpler and more in line with their own style of doing business in the private sector. "Industry can use their normal method of business [41]."

b. Minority Opinions

Four minor benefits were identified by the survey.

(1) Moves current technology to the user faster

This benefit was identified eight times.

The use of CIDs allows faster movement of technology from the market to the end-user as discussed in the literature review.

(2) Reduces product cost

This benefit was identified six times.

Use of the CID reduces Government specified performance requirements of the vendor. Thus, the contractors

providing material to the Government are better able to use existing processes to manufacture, test, and ship the material. This results in a more efficient operation and there are reduced costs inherent with this improvement in efficiency. The final outcome is the procurement of a more inexpensive product without a loss of quality.

(3) Reduces lead times

This benefit was identified six times.

This benefit is two-pronged and is evident in both the acquisition process and the delivery of the final product. Discussion of the acquisition benefits will follow in tandem with the next identified benefit.

The use of CIDs reduces product delivery times as discussed in the literature review.

(4) Simplifies the acquisition process

This benefit was identified five times.

"Use of a CID simplifies and speeds up the acquisition process [42]." As previously mentioned, the CID is a simpler document to prepare and use than a specification. Industry can more easily understand the contents of the document and determine the product that the Government is purchasing. This simplifies the job of the Government's procurement official as well.

Acquisition lead times can also be reduced because less time is required for response to proposals,

discussions, and, usually, draft proposals are not necessary. The advantages are: 1) increased customer satisfaction because it takes less time to order and receive a product, 2) reduced costs stemming from work stoppages awaiting material, and possibly, 3) reduced personnel requirements as a result of the efficiencies gained from simplifying the acquisition process.

c. Other benefits

(1) Improved quality

This benefit was identified three times.

The use of CIDs results in an increased level of quality in acquired products as discussed in the literature review.

(2) Reduced product testing

This benefit was identified four times.

Reduced product testing is a part of the benefit of reducing product description and requirements as discussed in the literature review.

(3) Economic order quantity savings

This benefit was identified once.

Procurement of commercial items through the use of CIDs allows the Government the option to capitalize on commercial economic order quantity levels. It is the opinion of the researcher that this benefit is a part of the reduction of product costs discussed in both the literature review and the minority opinion section of the DLA survey results.

(4) Shorter lead time for development of a CID versus a specification

This benefit was identified two times.

The CID, as a procurement tool, is a simpler document than a specification. The reduction in complexity of the document allows faster development as discussed in the literature review.

2. Government Contractor Survey Results

This section will address benefits identified in Government contractor survey results. The survey question asked was, "Briefly discuss any benefits you have experienced when selling to the Government when CIDs are used?"

The majority opinion section will address benefits identified five or more times by respondents. The minority opinion section will address benefits identified two or more times but not greater than five times. The last part of this section provides benefits identified in the survey that were not found in the literature review or named in the majority or minority opinion sections. A synopsis of the Government Contractor identified benefits is provided in Appendix L.

a. Majority Opinions

There were no majority opinions of identified benefits by contractors. No single benefit was identified more than the threshold level of five times to qualify for inclusion in this category.

b. Minority Opinions

(1) Reduces specifications and related restrictions

This benefit was identified four times.

As discussed in the literature review, use of a CID reduces tiering of reference documents and allows the contractor to use their normal methods of testing, packaging, and marking, thus reducing the complexity of the specification.

Use of CIDs also reduces the number of specifications that are used to procure products. Industry favors this trend.

(2) Plainer document/Industry can read and understand

This benefit was identified three times.

"You have to have an engineering degree to understand a specification. That is not true of a CID [42]." This viewpoint is consistent with the Government survey results.

(3) Reduced product cost

This benefit was identified three times.

This viewpoint is consistent with the benefits identified in the literature review and Government survey results.

(4) *No Government cost for tooling*

This benefit was identified two times.

As discussed in the Government survey results, this is another factor that reduces product cost because the vendor is able to use an established method of production to manufacture a product.

(5) *Vendor is sole source when a single award schedule is used.*

This benefit was identified two times.

The researcher did not analyze this benefit because it did not apply to the DLA Supply Centers. This benefit was identified in connection with GSA single schedule solicitation and award procedures.

c. Other benefits

All benefits in this section were identified once and were not identified in any other section.

(1) *More flexible document*

The use of a CID in procurement provides more flexibility to the contractor and contracting officer to resolve problems that arise in the acquisition process. There are fewer problems that arise and when a contractor takes exception, there is a quicker resolution of the issue. [42]

(2) *No requirements for First Article Testing*

This gain is associated with the reduced testing requirements connected with the use of CIDs. It is

not completely accurate, in that, testing requirements may be included, if necessary to ensure sufficient product quality. If testing is included, it is not as elaborate or costly as First Article Testing.

(3) Relies on industry standards

This benefit associates the use of CIDs with the data developed by industry to design, name, and market their products, not the NGS developed by trade associations. The Government uses these data in developing their CIDs and this improves the quality of the final document.

(4) Focuses Government acquisition emphasis on commercial products

The implementation of the CID program is another step forward for the Government in expanding the procurement of commercial products. This is attractive to industry because they do not have to create new products to sell to the Government, rather, they simply sell their existing line.

D. SUMMARY

This chapter presented the benefits associated with the use of CIDs, both in development and implementation, and for both the Government and the vendors who sell commercial products that do business with the Government. The summary of the three areas, literature review, DLA Supply Center surveys, and Contractor employee surveys, is presented in Table 1.

TABLE 1: SUMMARY TABLE OF THE BENEFITS OF CID USE

BENEFITS TO CID USE	LIT RVW	GOV'T	VENDOR
Reduced R&D time and costs	Yes	No	No
Uses industry standards and inputs	Yes	No	Yes
Shorter document development lead time	Yes	Yes	No
Reduced lead times	Yes	Yes	No
Technology to user faster	Yes	Yes	No
More competition/sources	Yes	Yes	No
Requires less maintenance	Yes	No	No
Reduces complexity of product description and requirements	Yes	Yes	No
Reduces cost, schedule, and technical risk	Yes	No	No
Improved product quality	Yes	Yes	Yes
Reduces contractor burden	Yes	Yes	Yes
Ability to compete for Govt business using existing lines	Yes	Yes	Yes
Reduces specifications	No	Yes	Yes
Plain language document	No	Yes	Yes
Streamlines acquisition	No	Yes	No
Reduces product cost	No	Yes	Yes
Economic order qty savings	No	Yes	No
More flexible document	No	No	Yes
Focuses acquisition emphasis on commercial products	No	No	Yes
Vendor is sole source when single award sked used	No	No	Yes

V. INHIBITORS TO CID USE

A. INTRODUCTION

This chapter addresses inhibitors identified during a comprehensive literature review on the development and implementation of CIDs for both the Government and industry. It also addresses the results of a survey of Government employees at DLA Supply Centers and contractors' employees of Defense contractors.

B. INHIBITORS TO CID USE IDENTIFIED IN THE LITERATURE REVIEW

1. Government Inhibitors

a. Development Inhibitors - Availability of Resources

" Given budgetary and personnel constraints in the...buying commands, there is little incentive to allocate funds and time toward developing alternatives to MILSPECs [32:47]." This is an inhibitor to both the development and implementation of commercial item descriptions.

b. Implementation Inhibitors

(1) Insufficient management emphasis

Support of management is required for the implementation of any program to be a success. Although support for the CID program has been bolstered significantly

in recent years, it has not always been strong. This has contributed to some of the initial lack of success of the program. [29:13] In more recent years management emphasis has increased but there are still pockets of resistance to this change in the leadership of some activities.

(2) Organizational inertia

Another factor that compounds management attention when it exists is organizational inertia [43:viii]. "The Department is like a supertanker - superb at accomplishing its primary mission but sluggish in changing course [43:viii]." Organizational inertia exists in any organization but is an exaggerated problem in the Government.

(3) Inadequate training

Many of the people involved in the acquisition of goods for the Government are not trained in the development or the use of CIDs. This is another impediment which has been reduced in scope over the past few years through the inclusion of training material in the Defense Systems Management College (DSMC) curriculum and through the creation of courses addressing NDI procurement. The 1990 DoD Authorization Act, Section 824, required DoD to establish a training program on nondevelopmental item acquisition for contracting officers and other acquisition personnel. Some progress has been accomplished in this area but it remains an inhibitor to achieving the full benefits of the CID program. [29:18]

(4) Maintenance of the document

To be effective, the CID must be a "living document" requiring constant market research and updates. This is currently a weakness in our specification system and has not been specifically addressed in the program implementation of CIDs.

...because specifications (CIDs) are locked in at the time of the contract award... any product or process improvements generated in the commercial sector cannot be incorporated into the DoD procurement without risking the charge of product substitution [32:xiii].

As noted in the previous chapter, a benefit of using a CID is the greater accessibility to current technology. Ironically, when document maintenance lapses, a CID can limit DoD's access to the most advanced technologies.

(5) Identification of commercial products

There is a lack of information in the Federal Government about commercial products that are available. Accessibility to this information would give specification writers and PR reviewers an opportunity for comparison of products [32:47]. Once the Government's needs have been identified through a product description, the contracting authority must conduct market research to ascertain the availability of commercial products [44:7].

(6) Statutory requirements

The single greatest statutory impediment is that the Government cannot choose who it does business with.

The Competition in Contracting Act (CICA) requires that all responsible sources are permitted to compete in a full and open competition. To qualify as a responsible source requires satisfactory - not outstanding - performance. [43:8]

Other statutory impediments are the socioeconomic programs which include such initiatives as small business preference, mandatory use of sheltered workshops and Federal Prisons Industries [45:8-1]. In each of these cases, the source may not or does not provide a commercial product. This impedes the use of the CID as a procurement tool.

(7) Institutional inhibitor

There are inherent differences between procurement in the private and public sectors. In the private sector there is a single constituency, a clear measure of success - profit, and a single focus - efficiency. [43:4]

The Government has many constituencies. The taxpayer is the single common thread that runs through all the constituencies, and the laws and regulations supporting the acquisition process focus on protecting the taxpayers' interests.

There is a balance between efficiency and equity in the Government. Equity tends to be determined by the political process and attempts to allow anyone to participate in selling goods and services to the agencies of the Government. [43:5]

2. Commercial Industry Inhibitor: Statutory and Regulatory Requirements

There are numerous certifications and reports that are required from vendors such as:

- Buy American Act certification
- Small Business certification
- Walsh Healey Act certification
- Ethics legislation requirements

These requirements add an administrative cost and burden that contractors do not face in the commercial market [38:8]. The costs of including these socioeconomic programs in the contracting process increase the overhead costs of vendors and ultimately increase the costs of procured products. When compared with the Uniform Commercial Code, the inefficiencies and costs of administration associated with the Federal procurement process are exorbitant.

Additionally, many criminal sanctions have been enacted for reporting errors by Defense contractors associated with the required certifications. This is another barrier to participation in the Government acquisition process. Many commercial companies are hesitant to endanger their corporate reputation over rules that are unrelated to product quality or efficiency. [32:xiii]

C. INHIBITORS IDENTIFIED IN THE SURVEY

1. DLA Supply Centers Survey Results

This section discusses the inhibitors identified by DLA Supply Center employees. The majority opinion includes factors named more than ten times. The minority opinion includes inhibitors identified more than five times but not more than nine times. The last part of this section provides inhibitors identified in the survey that were not identified in the literature review or in the majority or minority opinion sections. A synopsis of the inhibitors identified by employees is provided in Appendix M.

a. Majority Opinion

(1) Over/underspecification of the required product

This inhibitor was identified sixteen times.

Some representative survey comments include:

- "Overspecification of a product in a CID limits competition [46]."
- "If a CID is written correctly, the product will meet the specified requirements. If it is not, then possibly, you will get a sleazy operator that you would not get under a MILSPEC [41]."
- "If you don't define the product requirements correctly, you may get the wrong item. The product may be attractive dollarwise and easy to make for the contractor but when sent in - BOOM! [41]."

The description of the product's characteristics used in a CID is a key determinant in the level of competition achieved. It is also a factor in ensuring that the product received is the item the end user actually requested. Overspecification of the product's characteristics can result in reduced competition and available sources.

The other aspect of this issue occurs when an item is underspecified. This may reduce the quality of an item. It increases the difficulty of comparing bids because the lowest price may meet the named attributes of the product but may not actually meet the needs of the customer. The current emphasis on "Best Value" may not be met if the salient characteristics are not adequately delineated.

(2) Commodity/product related factors

This impediment was identified seventeen times.

CIDs are a unwieldy tool to use when the product involved is a high growth, technology intensive item. Commodity products, which are of slow technological growth and fairly generic in nature, are the easiest products to buy using CIDs.

The factors that make this an impediment are twofold. First, when using a CID to procure goods of this type, product evaluation can turn into a case of comparing

apples and oranges when the products offered are technologically oriented but have different features. The second aspect is that continuous maintenance of the CID is a must to keep up with state-of-the-art technology. As discussed previously, if the document is not maintained, then the vendor whose bid incorporates the newest technology may be penalized because the contracting officer has no method to analyze his product against those of his competitors on a level playing field.

Another product factor affecting the use of CIDs is an inherent military aspect of a required item. A product in this category has no comparable commercial market and a CID is not an acceptable procurement tool if a commercial market does not exist.

Finally, the survey revealed a reluctance to use CIDs when the item under procurement is mission critical. Some examples of this are:

- "There is a fear that if a product procured under a CID fails and someone gets hurt or dies, my head will be on the chopping block [47]."
- "CIDs are not appropriate for life-supporting, military unique products [28]."
- "CIDs are applicable for use in procuring noncritical items but I'm not convinced they should be used to buy essential items [48]."

The researcher believes that the hesitancy to use CIDs for mission critical items is rooted in the lack of Government

testing requirements. The contracting officer, in particular, and the system, in general, is relying on the commercial market acceptability to produce a product that will need to operate on demand in a life-or-death situation.

b. Minority Opinion

(1) Reduced quality control

This impediment was identified five times.

Some specific comments include:

- "To have control over the quality of the product, you must use specifications...With a CID, you have some control, not enough, but better than none [39]."
- "The use of CIDs is a shortcut of procurement versus quality [49]."

Items procured using CIDs are tested by the vendor, not the Government. The tests themselves are designed by the vendor, not the Government. This represents a dramatic shift from procurement under specifications where the Government specifies the required tests and the contractor was required to provide documentation that the delivered product conformed to the specification. If the vendor is disreputable then the Government is likely to get a product that is not in conformance with the contract. CIDs require the Government to trust the contractor.

(2) Availability of resources to manage the program

This impediment was identified five times.

Some relevant comments include:

- "I need the people to do the job. Congressional cuts are leading to an inability to do the job right. Standardization has been hurt [49]."
- "This program assumes an intensive effort on initial actions to make the program work [50]."
- "There are shrinking resources and expertise in DLA [51]."

Institution of any new program requires a considerable amount of work in initial development and implementation. CIDs are no exception to this rule. In this era of shrinking defense dollars some activities find themselves trying to manage this new program without the necessary resources. The result could lead to an improperly implemented program that creates more problems than it corrects.

(3) Packaging requirements

This inhibitor was identified five times.

One of the primary purposes of a CID is to alleviate the number of Government unique requirements placed on contractors that are selling commercial products to the Government, such as special packaging requirements. However, special packaging is sometimes required for a commercial product. Commercial packaging is not always sufficient to

protect the product in the rigors of a military environment.

[54] When special packaging is required, the vendor must change his normal process of packaging items to fulfill the contract. This creates a barrier to using the CID if the vendor does not desire to change his normal mode of business.

[55]

c. Other inhibitors

(1) Military Service resistance

This inhibitor was identified four times.

Some specific comments include:

- "There is a perception problem on the part of the customer that commercial items are not good enough for the military [52]."
- "We are unable to move the Services toward CIDS. [30]"
- "There is a reluctance of the Services to give up engineering responsibility and control of items. [51]"

The researcher believes that this inhibitor is formed through the combination of three inhibitors already named. Part of this inhibitor is organizational inertia, part is inadequate training, and part is the fear that a commercial product will not meet the quality requirements necessary to ensure performance under fire. The researcher does not have any data to support this conclusion because this issue was not within the scope of the thesis.

(2) Long lead time for document development and revision

This inhibitor was identified three times.

Although CIDs are developed faster than specifications, there is a belief that the length of the lead time for development and revision is an inhibitor to the use of CIDs. The length of time involved is approximately twenty-six weeks for development of a CID and the time for revision is approximately the same. [53] Nearly one-half of a year is needed to create or revise a document that is intended to streamline the acquisition process.

(3) Majority of PRs are simplified purchase

This inhibitor was identified on one survey.

One interviewee cited the use of purchase descriptions associated with simplified purchase as an inhibitor to the use of CIDs. In tandem with this comment, she cited the current use of an automated system developed for use in small purchase that standardizes the use of clauses on each purchase order. She also cited this system as an inhibitor because it would have to be changed to accommodate CIDs.

It is the opinion of the researcher that neither of these factors are valid inhibitors as cited. The researcher would categorize both as a part of organizational inertia. CIDs can be called out in a purchase description and

an automated system can be modified to incorporate the necessary changes to make the system work properly.

(4) Commodities are purchased using NGS

This inhibitor was identified three times.

Defense Fuels Supply Center is buying fuel products using NGS [23]. Since NGS have a higher priority of usage than CIDs, this is an inhibitor to the use of CIDs as a procurement tool [11:3-2].

(5) CID program does not streamline procurement

This inhibitor was identified one time.

The CID program and the push to procure commercial products has been added to the multitude of tasks and responsibilities of a Contracting Officer. Conversely, no requirements have been eliminated as a result of the implementation of the CID program, making the Contracting Officer's job more complicated still.

2. Government Contractor Survey Results

This section discusses the inhibitors identified by Government contractors. The majority opinion includes factors identified more than five times. The minority opinion includes inhibitors identified more than two times but not more than five times. The last part of this section provides inhibitors identified in the survey that were not identified in the literature review or in the majority or minority

opinion sections. A synopsis of the inhibitors identified by Government Contractors is provided in Appendix N.

a. Majority Opinion

(1) Over/underspecification and related problems

This inhibitor was identified six times.

Improper preparation of the item description in a CID can limit competition or result in the procurement of an inferior quality product as discussed in the DLA survey results.

b. Minority Opinion

(1) Single award schedules

This inhibitor was identified three times.

The researcher did not analyze this impediment because the situation exists in the GSA management of single award schedules and does not apply to the DLA Supply Centers.

(2) Constant market research and CID maintenance

This inhibitor was identified twice.

For CIDs to be an effective procurement tool, constant market research and document maintenance is required to ensure that up-to-date products and technology are being acquired as discussed in the literature review.

c. Other inhibitors

(1) Distribution of newly created or revised CIDs

This inhibitor was identified once.

The inability to obtain current procurement documents by commercial vendors limits their ability to bid on solicitations. The Hobart representative, Sue Eidel, stated that new CIDs were not released to industry [42]. It is the opinion of the researcher that the timely release of procurement specification documents is not a CID unique problem. The researcher's experience in the acquisition field allows him to recall the same criticism leveled by Defense contractors in many instances.

This inhibitor impacts the ability of a vendor to submit a timely bid in response to a Government solicitation. Without the current documents specified in the RFP, the contractor is only guessing at the salient product characteristics desired by the Government and may be declared nonresponsive to the solicitation.

(2) Small business set-asides

This inhibitor was identified once.

In the researcher's opinion, this is not a valid inhibitor to the use of CIDs. The respondent was an employee of a large business. He identified that his company may have the product that contains the most current technology and therefore is "the best product available". When the

procurement is a small business set-aside, his firm is unable to submit a bid to supply the item. In this situation, the use of CIDs has not been inhibited, rather, the ability to include all possible competitors to achieve the lowest possible price has been inhibited.

(3) Maintenance of equipment after award

This inhibitor was identified one time.

The inhibitor was identified in conjunction with the use of CIDs in awarding single award schedules. The researcher did not analyze this inhibitor because it applies to the CID implementation process at GSA, not at the DLA Supply Centers.

D. SUMMARY

This chapter presents the inhibitors associated with the use of CIDs, both in development and implementation, and for both the Government and for vendors who sell commercial products to the Government. The summary of the three areas, literature review, DLA Supply Center surveys, and Contractor employee surveys, is presented in Table 2.

TABLE 2: SUMMARY TABLE OF INHIBITORS TO THE USE OF CIDS

INHIBITORS TO CID USE	LIT RVW	GOV'T	VENDORS
Availability of resources to manage the program	Yes	Yes	No
Lack of mgmt emphasis	Yes	Yes	No
Organizational inertia	Yes	No	No
Lack of training	Yes	Yes	No
Constant market research / document maintenance reqd	Yes	Yes	Yes
Commercial items not identified	Yes	Yes	No
Statutes and regulations	Yes	Yes	No
Institutional inhibitors	Yes	No	No
Over/underspecification and related problems	No	Yes	Yes
Commodity related factors	No	Yes	No
Reduced quality control	No	Yes	Yes
Military resistance	No	Yes	No
Long document development lead time	No	Yes	No
Packaging requirements	No	Yes	Yes
Majority of PR's are Small Purchase	No	Yes	No
Commodities bought have NGS	No	Yes	No
Single award schedules	No	No	Yes
Small business set-asides	No	No	Yes
Distribution of new CIDs	No	No	Yes
Maintenance of equipment after award	No	No	Yes

VI. CONCLUSIONS AND RECOMMENDATIONS

A. CONCLUSIONS

The following conclusions were reached after the completion of the research effort for this thesis:

1. The use of CIDs as a practical contracting tool has some limitations.

CIDs are best utilized when contracting is performed by a centralized buying activity and when the item being procured is a stable, low technology product. A centralized buying activity needs some tool to compare and, possibly, consolidate the incoming purchase requests (PRs) to procure products that meet each customer's needs. A CID provides a common base for the buying activity to use in consolidating PRs from many different requesting commands.

As identified by both Government and industry, when these parameters are not met, CIDs can actually be as cumbersome as specifications to procure products for the Government. A high growth, technology-intensive market is constantly changing and producing new innovations. This change translates into constant market research to stay abreast of the latest developments in the field and updating the applicable CIDs. Specification document maintenance has been a noted weakness of the Government acquisition system in

the past and this weakness has not been addressed in the implementation of this program. Additionally, situations will arise, even when proper document maintenance occurs, when the offeror is proposing a new product or technology that the commercial marketplace has accepted but that has not been incorporated into the procurement process by the Government. When this situation occurs, the new technology will actually restrict the vendor from award because the CID used for procurement will not contain enough information to compare the offered product against the competition in a meaningful and fair manner.

2. The need for extensive training still exists.

Of the twenty-eight Government people interviewed, twelve replied they had not received any training on the use of CIDs. Only nine had received formal training. Additionally, the answers received to some of the other questions during the interviews revealed a lack of a thorough grasp of the CID program on the part of all personnel.

3. The use of CIDs does not significantly reduce the administrative burden of the acquisition process for DLA Supply Center personnel.

The CID is a simpler document than a specification and there is an associated reduction in complexity and workload for Government personnel, but not much. Previously, industry assumed much of the burden of sorting through the tiers of

reference documents called out in solicitations. Now, industry is pleased to be dealing with a relatively simple document and they are finding a reduction in workload. But for the typical Government employee, nothing was removed from his desk so he could work on CIDs. Instead, CIDs were put on his desk on top of everything else. This dilutes the effort that should and could be exerted towards the procurement of commercial products.

4. The use of CIDs in the acquisition process can reduce product costs and leadtimes.

The use of CIDs means the Government is acquiring commercial products. The resultant effect is a lower cost because:

- the vendor uses an established manufacturing process to make the product
- the development cost is spread over many customers instead of just the Government
- the item is mass produced and economies of scale occur
- CIDs do not usually include special testing requirements

Leadtimes are shortened because:

- the vendor uses an established manufacturing process to make the product
- CIDs do not usually include special testing requirements
- no development time is required for commercial products

5. The use of CIDs is attracting some commercial enterprises into the Government marketplace.

Eight of the seventeen vendors interviewed do not respond to Government solicitations when a specification is used to describe the requested product. All eight provide products to the Government when CIDs are used in solicitations. This could represent a significant expansion of the base of suppliers providing material to the Government if this trend continues across all Government activities.

B. RECOMMENDATIONS

1. Lobby Congress to raise the simplified small purchase threshold to at least \$500,000.00 for commercial products.

The move in Government is toward the procurement of commercial products. Raising the simplified small purchase threshold for acquisition of commercial products incentivizes this management objective. In a time of shrinking budget dollars, this action would reduce the administrative burden imposed on the acquisition process while procuring known and proven products.

In conjunction with raising the threshold, statutory and regulatory requirements associated with procurements over \$25,000.00 should be waived for commercial products purchased under the simplified method.

2. Focus training on the identification of commercial products and the clarity of salient characteristics.

For a CID to be used, a determination must be made as to whether or not a commercial product exists that can fill the needs of the customer. This is the first hurdle to be overcome. Education of users, and technical, contracting, and standardization personnel on the tools and methods available to identify commercial products provides an impetus toward procuring those same items.

The ability to write a clear and concise description of the salient characteristics of the product required is paramount to effective use of a CID without creating an administrative workload. A poorly written CID can result in a poor quality product or an item that does not meet the needs of the Government. An overspecified CID reduces competition and increases the possibility of a vendor protest. Spotighting the necessary requirements in a CID and expanding the abilities of the writers will increase the effectiveness of the CID program.

3. Ensure that sufficient management emphasis is placed on document maintenance, not just development.

One of the problems associated with the use of Military and Federal specifications is that they are not kept up-to-date. This problem is magnified with CIDs because the salient characteristics listed represent a synthesis of the

current products in the marketplace. The commercial markets and products are constantly changing. Failure to maintain the document can render the document ineffective if the description in the CID represents a product that no longer exists in the marketplace.

The researcher recommends that CIDs be reviewed on a biannual basis to determine the accuracy and currency of information contained in the document.

4. Examine fuels managed by DFSC to determine if CIDs can be used in conjunction with Nongovernmental Standards.

The fuels bought by the military are often the same as procured by commercial firms. The NGS established for fuels may be sufficient to use for Government procurement. If it is not, the additional testing requirements can be included in a CID thereby eliminating the need for a specification.

5. Publish a definitive policy statement regarding the procurement of commercial items to satisfy needs that are deemed "mission critical".

There is a hesitancy to use CIDs to procure commercial items that may be used in crucial situations, such as combat. This reluctance could be reduced or eliminated if there was authoritative guidance on this issue. A definitive policy statement regarding the procurement of commercial items to satisfy "mission critical" needs is necessary to achieve full program effectiveness.

C. ANSWERS TO RESEARCH QUESTIONS

1. What are the benefits and inhibitors to the use of CIDs in DLA Supply Centers?

The benefits and inhibitors to the use of CIDs were identified in the surveys of Government and industry personnel. They are:

a. Benefits

(1) Reduced product cost

Development cost and time are reduced because the product exists and is sold in a commercial market. In conjunction with the fact that this is an existing product, the processes used to manufacture the product do not have to be changed in order to sell the same product to the Government. This all equates to a reduced product cost.

(2) Reduced lead time

The vendor is able to use existing processes to manufacture, pack, mark, and ship the product. Because the contractor does not change his normal mode of business, the product is produced and delivered faster. In many cases, the required item is in inventory and can be taken off the shelf for delivery.

(3) Increased competition and number of available sources

Many companies simply will not sell to the Government when specifications are used to solicit for

required products. Use of a CID reopens that door and attracts vendors to compete for Government business. A CID calls out the salient characteristics of the required product. This creates the atmosphere for increased competition because more vendors: 1) are competing for Government business, and 2) have products that meet the requirements as delineated in the CID.

(4) Plain language document

Both Government and industry personnel like using a CID because it is easy to read and understand. A CID identifies only the salient characteristics required, contains no testing requirements, and contains no tiering of references. The simplicity of the CID translates itself into a benefit that promotes the use of the document in procurement.

(5) Reduced number of specifications

Many items previously procured using a specification can now be procured using a CID. This is a benefit because a CID is a plain language document with less tiering of references and reduced complexity.

(6) Moves current technology to the user faster

Market research plays a key role in the development of a CID. This research ensures the inclusion of current technology available in the commercial marketplace. Use of a CID in a procurement promotes the ability to place

the available technology into the hands of the user much faster than through the use of a specification.

(7) Simplifies the acquisition process

The CID is an easier document to prepare and use than a specification because of the reduced complexity of the document, negligible testing requirements and tiering, and a reduction in the number of product characteristics deemed necessary to fulfill the needs of the end user. This makes the job of the acquisition official easier and customer satisfaction is increased.

(8) Improved product quality

Commercial products are proven performers in the competitive marketplace of the private sector. In order to stay competitive and survive in the commercial marketplace, a high level of quality must be built into the product. The vendor establishes and maintains his own quality assurance process to ensure that the items sold and delivered to customers meet certain standards deemed necessary to assure customer satisfaction. When the Government buys that same product, they are reaping the benefit of the "survival of the fittest" philosophy that permeates the private sector.

(9) More flexible document

Some elements of industry feel that the CID is a more flexible procurement tool than a specification. A CID can allow the contracting officer the ability to resolve

problems that arise in the acquisition process allowing quicker resolution of contracting issues.

(10) *No requirements for First Article Testing*

This benefit is associated with the reduction in testing requirements connected with the use of CIDs. It saves money for both the contractor and the Government, ultimately reducing product cost.

(11) *Relies on industry standards*

A CID is developed using information gathered from the commercial marketplace. This results in a document that includes the industry norms for available products.

(12) *Industry is included in document development*

Inclusion of industry input in the development of the CID helps to ensure that the Government has developed a procurement document that accurately describes the desired product without creating additional problems that delay the acquisition process. Ideally, the document alleviates contractor questions and contract modifications relating to inadequate product descriptions.

b. Inhibitors

(1) Over/underspecification of the required product

The description of the product's characteristics used in a CID is a key determinant in the level of competition achieved. It is also a factor in ensuring that the product received is the item the end user actually requested. Overspecification results in reduced competition and available sources. Underspecification results in acceptance of a product that does not meet the end user's needs.

(2) Commodity/product related factors

An item that is inherently military inhibits the use of CIDs because there are no commercial applications or markets in existence to provide an existing product to the Government.

Mission critical items inhibit the use of CIDs because Government personnel are reluctant to rely on vendor testing of commercial products for items.

High growth, technology intensive items can be difficult to procure using CIDs because constant market research is required to ensure that the procurement document contains the most current description of products available in the marketplace. When the document is improperly maintained,

a CID actually restricts the procurement of current technology by describing products that are out-of-date.

(3) Reduced quality control

Items procured using CIDs are tested by the vendor, not the Government. The tests themselves are designed by the vendor, not the Government. If the vendor is disreputable or the specifications are poorly written then the possibility exists that the Government will accept a product that does not meet the needs of the customer.

(4) Availability of resources to manage the program

The CID program represents an investment in time and energy by Government personnel to implement and maintain. Resources in all Department of Defense activities are shrinking and DLA is no exception. Additionally, the implementation of the CID program does not relieve any other acquisition responsibilities. Personnel at some DLA Supply Centers believe this is an inhibitor to the effective use of CIDs.

(5) Long lead time for document development

One purpose of the CID program is to streamline acquisition procedures, yet, it takes twenty-six weeks to develop and publish a CID. Although this time frame is faster than that for a specification, the lengthiness of

the process reduces the flexibility of the contracting officer and inhibits use of the document.

(6) Special packaging requirements

CIDs normally do not specify special packaging requirements. When special packaging is required, the vendor must change his normal process of packaging items to fulfill the contract. This creates a barrier to using the CID if the vendor does not desire to change his normal mode of business.

(7) Distribution of newly created or revised CIDs to industry

Some representatives of industry feel that newly created or revised CIDs are not released in a timely manner to industry. This creates a barrier to vendor response to solicitations when they do not have access to the documents cited in the request for proposal.

(8) Small business set-asides

This inhibitor was identified by industry and applies only to large businesses. It is not an inhibitor to the use of CIDs for Government, only to the ability to bid when CIDs are used if the vendor is a large business concern and the solicitation has been set-aside for small business participation only.

2. What is a Commercial Items Description?

A Commercial Item Description is an acquisition tool designed to reduce DoD reliance on noncommercial products. The document is more simplified than a standard or specification because it includes only the salient characteristics of the product. Another aspect of its simplicity is that it does not include testing requirements, tiering of reference documents, or, normally, special packaging requirements.

The priority level of usage has been raised above standards and specifications, requiring DoD to locate and purchase commercial and commercial-type products that are already established in the marketplace. This is accomplished by conducting market research activities to determine product and feature availability. This information is compared with the needs of the user and a CID is created incorporating data from both sources.

3. How are CIDs developed and what are the benefits and inhibitors to the use of CIDs in the development process?

CIDs are developed when a nongovernment standard (NGS) has not been established by industry or when a NGS has been established but requires tailoring to meet the Government's needs. Market research is conducted to determine if an existing commercial product will satisfy the requirement

according to established market acceptability criteria. A draft CID is prepared using the data collected from the market research and provided by the end user. The Preparing Activity sends the completed draft CID to industry and the document custodian for review. Once the review is complete and all necessary revisions are complete, the document is forwarded for document numbering.

The benefits of this process are:

- Industry input is included in the document construction providing a higher quality document for use in procurement.
- Document development time is shortened streamlining the acquisition process.
- Research and development time and costs are reduced or completely avoided.

The inhibitor to CID development is the lack of resources required to manage the program. Commercial items must be identified. Market research must be conducted and market acceptability must be established. To accomplish each of these facets of CID development, resources must be assigned and managed.

4. How are the use of CIDs being implemented at DLA Supply Centers and what are the benefits and inhibitors being experienced in the implementation process?

Initial implementation consisted of technical personnel at each DLA Supply Center reviewing MILSPECs for candidates that could be converted to CIDs. Once converted, the specification was canceled or superseded.

The next part of implementation has been to identify products procured by the Supply Centers for which there are commercial products or have substitutes. Once these products have been identified, a CID is developed.

Training on the use and development of CIDs has been accomplished at each of the centers and at DLA headquarters. Primary means of training were the OSD classes and informal training using on-the-job methods, suspense file reviews, regulation updates, and informal seminars.

The benefits of using CIDs in the implementation process are:

- Product delivery times are shortened because existing products and processes are able to be used by the vendor.
- Government acquisition has an enhanced ability to position state-of-the-art equipment for field use.
- The use of CIDs increase competition and the number of sources due to document simplicity and product descriptions.
- Special Government requirements such as First Article Testing are reduced.
- Product description and requirements are reduced and less complex.
- Cost, schedule, and performance risk are reduced.
- The contractor's administrative burden is reduced.

- Contractors are able to compete for Government procurement dollars using existing tooling and products.
- Use of CIDs reduces the number of specifications that are required to be developed and maintained.
- A CID is a plain language document that is easy to read and understand.
- Product costs are reduced.
- Acquisition lead times are reduced.
- The acquisition process is simplified.
- There is an improved quality of products received.

The inhibitors to using CIDs in the implementation process are:

- Insufficient management emphasis on the use of CIDs.
- Organizational inertia that resists the change to any new program such as CIDs.
- Document maintenance is more constant with a CID than a specification.
- Identification of commercial products is required before a CID can be developed and implemented.
- Statutory requirements impose an administrative burden on Defense contractors and possible criminal penalties discourage some vendors from participating in the Government process.
- Government institutional inhibitors such as the inability to choose with whom we do business.
- Over/underspecification of the product description affects the quality of the product received and the extent of competition obtained.
- Commodity/product related factors such as "mission critical" items and product maturity.
- Quality control is reduced because the Government is relying on contractor testing methods and procedures.

- A limited number of resources are available to manage the program.
- The Military Services are resisting the procurement of commercial products, thus affecting the ability of the DLA Supply Centers to use CIDs.
- CIDs require a long lead time for development.
- Special packaging requirements may be necessary for inclusion in the CID and a commercial contractor may choose not to bid on that solicitation to avoid the additional requirements.
- The majority of PRs at a Supply Center are simplified small purchase and it is easier to use a purchase description than a CID.

5. How can the inhibitors be overcome?

Some of the inhibitors, lead time for development, packaging requirements, reduced quality control, and insufficient management emphasis, have already been addressed in the regulations as they exist today. Removal of the inhibitors is now a matter of continued education of participants in the acquisition process concerning the requirements of the CID program.

Continued education of the Service personnel will also assist in removing another impediment, military Service resistance. The benefits have not yet been fully realized in this program and Service resistance only hampers this realization. Education stressing reduced leadtimes and product costs will reduce friction between the Services and DLA allowing the program to go "full steam ahead."

The institutional impediment can only be overcome if Congress relaxes "full and open competition", changing it to "effective competition", which would provide contracting officers more latitude in choosing with whom the Government does business.

Resource availability and allocation are key components of the remaining inhibitors:

- constant document maintenance
- identification of commercial products
- over/underspecification of the product
- availability of resources to implement and maintain the CID program

A centralized office for identification of commercial products, document maintenance, and expert assistance on description preparation could possibly be a more effective use of resources and remove this inhibitor. Industry could focus on one point of contact for submitting commercial product information to develop and update CIDs. Government would also have one expert point of contact to refer suggestions, ask questions, and provide input on acquisition of commercial products using CIDs. Individual activities would be relieved of the program burdens and could concentrate activity on actual procurement of commercial products.

The researcher feels that the CID program was overlaid on the existing rules and regulations of the acquisition

process. For this program to be effective in the Government, there has to be an incentive for Government personnel involved in the acquisition process to participate. One incentive is to allow the purchase of commercial products using the simplified small purchase procedures. The definitive requirement defining a commercial product would be a CID. In this case, both Government and industry are incentivized by the immediate reduction in administrative burden that simplified small purchase procedures offer. This is not a new concept as the Post Office currently uses simplified purchase procedures for acquisition of commercial items up to one million dollars.

The last inhibitor to be addressed are commodity and product related factors. First, the issue of acquisition of a mission critical item needs to be addressed directly. Is the procurement of a commercial item acceptable and/or desired when the product in question may be involved in a life-or-death situation? Addressing the question will remove much of the doubt that currently exists in this area.

Second, a test should be run to procure high growth, high technology products using CIDs to determine the most effective way to write CIDs and award contracts that are fair and reduce contract administration burdens instead of adding to them. Industry should be proactively involved in the test as evaluators, as well as participants.

D. AREAS FOR FURTHER RESEARCH

There are three areas for further study:

1. Expansion of the Government supplier base.

Survey results indicate that expansion of the Government supplier base may be a partial result of the use of CIDs and the push to procure commercial products. A specific study of the Government supplier base and the causal relationship resulting from the procurement of commercial items would provide further insight into one benefit of the use of CIDs.

2. Comparison of the cost of procurement of the same product using a specification and a CID.

Defining the processes to procure an item with a specification and a CID and analyzing the costs associated with each process could provide a solid basis for management decisions regarding resource allocations.

3. Analysis of the United States Postal Service use of simplified purchase procedures to procure commercial products.

The Postal Service is using simplified purchase procedures to procure commercial products to a threshold of one million dollars. Research is recommended to analyze this process, its' benefits, inhibitors, and associated costs.

APPENDIX A: GOVERNMENT PERSONNEL INTERVIEWS

CMD	NAME	POSITION	YEARS IN:		
			JOB	CMD	FIELD
DCSC	Christian, M.	Quality, Division Chief	3.5	22.0	18.0
DCSC	Merritt, S.	Technical, Supervisor	4.0	20.0	10.0
DCSC	Ries, P.	Procurement, Analyst	4.0	12.0	12.0
DESC	Depp, R.	Quality, Director	7.0	30.0	8.0
DESC	Elliott, R.	Technical, Supervisor	4.0	10.0	10.0
DESC	Holland, E.	Quality, Director	1.5	10.0	10.0
DESC	Hudson, A.	Technical, Elect. Eng.	10.0	18.0	19.0
DESC	Krentz, G.	Procurement, Analyst	2.5	8.0	8.0
DESC	Massengale, J.	Quality, Specialist	8.0	10.0	8.5
DESC	Pacak, J.	Quality, Division Chief	4.0	4.0	18.0
DFSC	Brawley, R.	Technical, Chemist	5.0	5.0	20.0
DFSC	Gray, R.	Technical, Division Chief	1.0	9.0	9.0
DFSC	Pamplin, D.	Technical, Chemist	4.0	4.0	10.0
DFSC	Stanley, D.	Procurement, Supervisor	13.0	15.0	23.0
DGSC	Alexander, M.	Technical, Standz. Chief	3.0	7.0	12.0
DGSC	Dinelli, P.	Quality, Division Chief	4.0	30.0	25.0
DGSC	Fabrizio, M.	Procurement, Analyst	14.0	31.0	14.0
DGSC	Schaefer, R.	Quality, Value Eng Chief	4.5	4.5	8.0
DISC	Angelopoulos, M.	Procurement, Policy Chief	6.0	13.0	9.5
DISC	Kenig, H.	Quality, Deputy Director	4.0	16.0	4.0
DISC	Pryor, D.	Quality, QA Manager	4.0	17.0	15.0
DISC	Turkov, V.	Technical, Branch Chief	1.0	4.0	20.0
DPSC	Burton, D.	Technical, Branch Chief	1.5	8.0	12.0
DPSC	Cuttler, M.	Technical, Division Chief	11.0	38.0	38.0
DPSC	Diamant, E.	Procurement, Policy Branch	6.0	6.0	6.0
DPSC	Mannion, M.	Technical, Section Chief	12.0	24.0	27.0
DPSC	Pallidino, D.	Quality, QA Manager	4.5	19.0	15.0
DPSC	Wilson, E.	Technical, Chief, Logistics	7.0	16.0	14.0
Procurement Averages			3.8	15.1	12.0
Quality Averages			7.0	14.7	15.4
Technical Averages			5.4	14.4	15.0

APPENDIX B: GOVERNMENT CONTRACTOR EMPLOYEE INTERVIEWS

COMPANY	NAME	COMMODITY	YEARS IN FIELD
3M	Agile, M.	Mining	9.0
Beckman Instruments	Kennedy, D.	Health Care	5.0
Canon	Youthers, T	Electronics	20.0
Creonite	Ubben, C.	Manufacturing	37.0
Eco Labs	Dempsey, L.	Chemicals	14.0
Hallmark Cards, Inc.	Foster, J.	Paper Products	6.0
Hanes Underwear	Engle, J.	Fashion	11.0
Hayworth, Inc.	Stevenson, G.	Consumer Products	15.0
Hobart Manufacturing	Eidel, S.	Food Industry	7.0
MK V Office Furniture	Schulte, W.	Consumer Products	25.0
Mosler Safes	Arnold, K.	Consumer Products	10.0
Poloroid	Winston, B.	Conglomerate	35.0
Sharp Electronics	Essenfeld, A.	Electronics	9.0
Stanford Telecomm.	Morrison, D.	Telecommunications	10.0
Textronics	Tucker, D.	Aerospace	18.0
Werrez Inc.	Miller, K.	Construction	27.0
Xerox	Hodges, T.	Electronics	25.0
Average Years in Field:			16.65

APPENDIX C: DLA SUPPLY CENTERS SURVEYED

SUPPLY CENTER	LOCATION
Defense Construction Supply Center	Columbus, OH
Defense Electronics Supply Center	Dayton, OH
Defense Fuels Supply Center	Alexandria, VA
Defense General Supply Center	Richmond, VA
Defense Industrial Supply Center	Philadelphia, PA
Defense Personnel Supply Center	Philadelphia, PA

APPENDIX D: INDUSTRY COMMODITY CATEGORIES

CATEGORY	SURVEYED	WHY (if not surveyed)
Advertising and Public Relations	No	Service
Aerospace	Yes	
Agriculture	No	Not a commercial product used by Government
Automotive	No	CIDs not developed
Aviation	No	Service (airlines)
Banking	No	Service
Broadcasting	No	Service
Chemicals	Yes	
Computers and Electronics	Yes	
Conglomerates	Yes	
Consumer Products	Yes	
Energy	No	CIDs not developed
Fashion	Yes	
Film and Entertainment Industries	No	Service
Financial Services	No	Service
Food and Beverage Industry	Yes	
Health and Pharmaceuticals	Yes	
Hospitality	No	Services
Insurance	No	Not a product used by Government
Manufacturing	Yes	
Metals and Mining	Yes	
Paper and Forest Products	Yes	
Publishing	No	Service
Real Estate and Construction	Yes	
Retailing	No	Service
Telecommunications	Yes	
Transportation	No	Service
Travel	No	Service
Utilities	No	CIDs not developed

APPENDIX E: TELEPHONE CALL DISPOSITION SHEET

PHONE NUMBER _____

DATE _____ TIME _____ DISPOSITION CODE _____

INTERVIEWER _____

INTERVIEWEE _____

ACTIVITY _____ TITLE _____

YEARS IN THIS JOB _____ YEARS AT THIS ACTIVITY _____

CONFIDENTIALITY REQUESTED _____

NOTES

APPENDIX F: STANDARD INTRODUCTION FOR TELEPHONE SURVEY

"My name is Dale Cottongim and I am a student at the Naval Postgraduate School in Monterey, California. I am conducting research into the benefits and inhibitors to the use of commercial item descriptions. I was referred to your office by (insert proper name) and am asking you to participate in a telephone survey this (morning, afternoon) on this subject that will take about fifteen minutes."

APPENDIX G: DLA SUPPLY CENTER QUESTIONNAIRE

1. How long have you worked in the field you are currently in?

2. (a) Does your organization use Commercial Item Descriptions (CIDs)?

yes no

(b) If yes, would you rate the frequency of use as:

High Medium Low None

3. Are you responsible for your command's use of CIDs?

yes no

If no, who is?

4. Describe how CID use is accomplished at your command?

5. Have you received training on CIDs?

yes no

If yes, what kind?

6. What are the benefits of using CIDs at your command?

7. What are the inhibitors to using CIDs at your command?

8. What has your organization learned from previous use of CIDs? (disregard if answer to question two, part b is none.)

9. How do CIDs affect the procurement of commercial off-the-shelf items?

Encourage No affect Discourage

10. In your opinion, is the use of CIDs an effective program that improves defense procurement? Explain.

yes no maybe

APPENDIX H: GOVERNMENT CONTRACTOR QUESTIONNAIRE

1. Have you sold commercial or commercial type products to the Federal Government?

yes no

Have you sold commercial or commercial-type products to Defense Logistics Agency Supply Centers?

yes no

2. Have you sold commercial or commercial type items to the Federal Government solicited using a Commercial Item Description (CID)?

yes no

3. In your opinion, is the use of commercial item descriptions a program that improves defense procurement? Explain.

4. Briefly discuss any problems experienced in providing the requested items under a CID?

5. Which of the problems associated with providing material to the Government under CIDs are the same as when providing the material under MILSPECs?

6. Briefly discuss any benefits you have experienced by selling to the Government using CIDs.

7. Which of the benefits associated with providing material to the Government using CIDs are the same as when providing the material using MILSPECs?

8. Which do you prefer bidding against, a MILSPEC or a CID contract? Why?

APPENDIX I: COMMAND RESPONSIBILITY FOR CID USE

AS IDENTIFIED BY COMMAND

Cmd	Are you Responsible:				Who is:					
	Yes	No	Some	Unk	Tech	Proc	Eng	Std	Combo	Other
DCSC	0	1	2	0	1	0	0	0	2	0
DESC	0	6	1	0	5	0	1	0	1	0
DFSC	1	1	0	2	1	0	0	0	1	0
DGSC	0	3	1	0	1	0	0	2	1	0
DISC	1	2	0	0	2	0	0	0	1	0
DPSC	3	3	0	0	4	1	0	0	0	2
Total	5	17	4	2	14	1	1	2	6	2

AS IDENTIFIED BY FUNCTIONAL DEPARTMENT

Field	Are you Responsible:				Who is:					
	Yes	No	Some	Unk	Tech	Proc	Eng	Std	Combo	Other
Tech	5	4	2	1	5	0	1	1	2	2
Proc	0	5	0	2	2	0	0	1	0	2
Qual	0	8	0	1	7	0	0	0	1	0
Total	5	17	2	4	14	0	1	2	3	4

Tech = Technical Personnel
 Proc = Procurement Personnel
 Qual = Quality Personnel
 Std = Standardization Personnel
 Eng = Engineering Personnel
 Combo = Combination of Personnel

APPENDIX J: TRAINING RECAPITULATION

HAVE YOU RECEIVED TRAINING ON CIDS?

CATEGORY	COMMAND	NUMBER
No Training Received	DCSC	1
	DESC	4
	DFSC	3
	DGSC	1
	DISC	1
	DPSC	2
	Total	12
Training Received	DCSC	2
	DESC	3
	DFSC	1
	DGSC	3
	DISC	3
	DPSC	4
	Total	16

TYPE OF TRAINING RECEIVED:

FORMAL CLASSES	NUMBER
Defense Specification Management	6
Technical Writing (OSD Sponsored)	4
DoD Seminars	2
Command CID Program Initialization	1
Shared Procurement (Joint Agency Trng)	1
How to Write A CID Workshop	1
LEDAC - Ft Lee	1
GSA Classes	1
Total	17

INFORMAL/OJT

Related Experience in other jobs	2
Suspense Reviews/Regulation Updates	3
On-the-Job Training	5
Total	10

APPENDIX K: CID BENEFITS IDENTIFIED BY DLA EMPLOYEES

BENEFIT NAMED	FREQUENCY			
	Total	PROC	QUAL	TECH
Current technology to user faster	5	1	2	2
No Government cost for tooling	1	1	0	0
Economic order quantity savings	1	1	0	0
Greater competition/more sources	10	3	4	3
Improved quality of product	3	1	1	1
Reduced lead time	8	2	2	4
Reduced cost of product	8	1	4	3
Simplifies/streamlines the acquisition process	6	1	1	4
Reduces specifications and related restrictions	10	1	4	5
Reduces product testing	4	0	2	2
Shorter development lead time for CID vs SPEC	2	0	0	2
Plainer document/Industry can read and understand	10	1	3	6
Fewer overall associated problems with CIDs	1	0	0	1
Requires less maintenance than specifications	1	0	0	1
Standard format	1	0	0	1
No tiering of documents	1	0	0	1
Uses industry expertise	2	0	2	0
None	4	2	1	1
Unknown	2	2	0	0

PROC = Procurement personnel

QUAL = Quality personnel

TECH = Technical personnel

APPENDIX L: CID BENEFITS IDENTIFIED BY CONTRACTORS

BENEFIT NAMED	FREQUENCY
No Government cost for tooling	2
Greater competition/more sources	1
Improved quality of product	1
Reduced lead time	1
Reduced cost of product	3
Simplifies/streamlines the acquisition process	1
Reduces specifications and related restrictions	4
Reduces product testing	1
Plainer document/Industry can read and understand	3
No requirements for First Article Testing	1
Relies on industry standards	1
More flexible document	1
Focuses acquisition emphasis on commercial products	1
Vendor is sole source when single award schedule is used	2
None	2
Unknown	4

APPENDIX M: CID INHIBITORS IDENTIFIED BY DLA EMPLOYEES

INHIBITOR NAMED	FREQUENCY			
	Total	PROC	QUAL	TECH
Majority of PRs are simplified purchase	3	3	0	0
Constant market surveillance required	2	1	0	1
No acquisition process streamlining for use	1	1	0	0
Lack of training/education	2	0	0	2
Commodity/product related factors	13	2	4	7
Difficult to use with current automated system	1	1	0	0
Packaging requirements	5	2	1	2
Not practical for mission critical items	6	0	3	3
Lack of management emphasis	3	1	0	2
Reduced quality control	8	1	4	3
Long development lead time required	3	0	1	2
Over/underspecification and related problems	16	1	5	10
Commodities bought have NGS, which has higher priority than CIDs	3	0	1	2
Availability of resources to manage program	5	2	1	2
Industry product hype affects market research	1	0	0	1
Statutes and regulations	1	0	0	1
Military Service resistance to relinquish control	3	0	2	1
Commercial items not identified	2	1	0	1
None	3	1	2	0
Unknown	1	1	0	0

PROC = Procurement personnel

QUAL = Quality personnel

TECH = Technical personnel

APPENDIX N: CID INHIBITORS IDENTIFIED BY CONTRACTORS

INHIBITORS IDENTIFIED	FREQUENCY
Packaging requirements	1
Reduced quality control	1
Over/underspecification and related problems	6
Lack of configuration control	1
Single award schedules	3
Constant market research and CID maintenance required	2
Small Business Set-asides	1
Distribution of newly created CIDs	1
Maintenance of equipment after award	1
None	2
Unknown	2

APPENDIX O: GLOSSARY OF ACRONYMS

CICA	Competition in Contracting Act
CID	Commercial Item Description
DCSC	Defense Construction Supply Center
DESC	Defense Electronics Supply Center
DFSC	Defense Fuels Supply Center
DGSC	Defense General Supply Center
DISC	Defense Industrial Supply Center
DLA	Defense Logistics Agency
DoD	Department of Defense
DPSC	Defense Personnel Supply Center
DSMC	Defense Systems Management College
FEDSPEC	Federal Specification
FPMR	Federal Property Management Regulation
FSC	Federal Supply Class
GAO	General Accounting Office
GSA	General Services Administration
LSA	Lead Standardization Activity
MILSPEC	Military Specification
NDI	Nondevelopmental Item
NGS	Nongovernmental Standards
OFPP	Office of Federal Procurement Policy
OJT	On-the-job Training

OSD Office of the Secretary of Defense
PA Preparing Activity
PR Purchase Request
R&D Research and Development

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